

# **Piedmont Technical College Course Syllabus**

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## **COURSE INFORMATION**

**Course Prefix/Number:** MTT 130

**Title:** Fundamentals of Geometric Dimensions and Tolerances

**Responsible Division:** Industrial/Engineering

**Last Day to Withdraw from this Course:** For the last date to withdraw from this course, consult the current *Student Calendar*.

### **Course Description:**

For course, credit hour, pre-requisite(s) and co-requisite(s) information, visit the Detailed Course Information page: [www.ptc.edu/courses/mtt130](http://www.ptc.edu/courses/mtt130).

### **Textbook and Other Materials:**

For textbook information and additional required and/or supplemental materials, visit the [college bookstore](http://www.ptc.edu/bookstore) (www.ptc.edu/bookstore).

### **Proctored Examinations:**

Proctored examinations for distance learning courses taken at non-PTC campuses may require a proctoring fee for each exam taken.

## **COURSE POLICIES**

Course policies are available online through the *Academic Catalog* and *Student Handbook*. Visit the [Course Policies page](http://www.ptc.edu/syllabus/policies) (www.ptc.edu/syllabus/policies) for a detailed list of important policies and more information.

## **GRADE POLICY**

Detailed grading policy information can be found on the [Grading Policy webpage](http://www.ptc.edu/grading-policy) (http://www.ptc.edu/grading-policy). Final grade appeal information is available in the [Academic Catalog](http://www.ptc.edu/catalog/) (http://www.ptc.edu/catalog/).

## **ACCOMMODATIONS**

### **Accommodations for ADA:**

Information is available on the [Student Disability Services webpage](http://www.ptc.edu/ada) (<http://www.ptc.edu/ada>).

## **RATIONALE**

### **Why do I need this course?**

Geometric Dimensioning and Tolerancing is used by many industries to specify tolerances related to the shape, form, or position of particular features of a manufactured item. This type of tolerancing is used in conjunction with standard blueprint practices to ensure parts are not only made to tolerance, but will actually fit during assembly and use. The modern machinist must be able to interpret this form of tolerancing.

## **PROGRAM INFORMATION**

For program information including required courses, program learning outcomes, gainful employment information and advisement information, refer to the Academic Program webpage. Go to [Academics](http://www.ptc.edu/academics) (<http://www.ptc.edu/academics>), select your program, and then select Credentials Offered.

## **COURSE STUDENT LEARNING OUTCOMES**

Upon successful completion of this course and/or clinical, each student will be able to:

- Interpret and evaluate the purpose of G. D. & T.
- Evaluate and interpret symbols relating to G. D. T.
- Compare the significance of material condition modifiers.
- Dimension blueprints using standard and G. D.T. systems.
- Interpret blueprints using G. D. T.

## **GENERAL EDUCATION COMPETENCIES**

### **Piedmont Technical College General Education Competencies for All Graduates:**

*This course may address one or more of the following General Education Competencies (assessment will be stated when applicable):*

#### **Communicate effectively.**

Assessment:

Explain the rules and procedures for effectively interpreting GDT symbols and tolerances.

#### **Apply mathematical skills appropriate to an occupation.**

Assessment:

Analyze the effects on product acceptance using appropriate GDT formulas.

#### **Employ effective processes for resolving problems and making decisions.**

Assessment:

N/A

#### **Demonstrate the basic computer skills necessary to function in a technological world.**

Assessment:

N/A

*To validate proficiency in the general education competencies, students in some programs will be tested using Work Keys.*